STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/ watershed-administrative -unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered " does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. *Name of proposed project, if applicable:*

   Timber Sale Name: Grayback *Agreement #:* 76604

2. *Name of applicant:* Department of Natural Resources

3. *Address and phone number of applicant and contact person:*

   Bob McKellar
   Department of Natural Resources
   P.O. Box 190
   Colville, WA 99114-0190

   (509) 684-7474

4. *Date checklist prepared:* July 12, 2004

5. *Agency requesting checklist:* Department of Natural Resources

6. *Proposed timing or schedule (including phasing, if applicable):*

   a. *Auction Date:* February 22, 2005
   b. *Planned contract end date (but may be extended):* February 1, 2007
   c. *Phasing:* None

7. *Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.*

   Yes, additional activities are listed below.

   a. *Site preparation:* All units will be monitored to determine the need for a prescribed burn. A prescribed burn may be done if funding is available.

TSU NO: 1	PILE & BURN	03/01/2007	85 Acres
TSU NO: 1	BROAD BURN	03/01/2007	85 Acres
TSU NO: 2	PILE & BURN	03/01/2007	83 Acres
TSU NO: 2	BROAD BURN	03/01/2007	83 Acres
TSU NO: 3	PILE & BURN	03/01/2007	43 Acres
TSU NO: 3	BROAD BURN	03/01/2007	43 Acres

b. *Regeneration Method:* Natural regeneration will occur in all units. In addition, all units will be hand planted with approximately 225 trees per acre the spring following sale completion.

TSU NO: 1	HAND PLANT	03/15/2007	85 Acres
TSU NO: 2	HAND PLANT	03/15/2007	83 Acres
TSU NO: 3	HAND PLANT	03/15/2007	43 Acres

c. *Vegetation Management:* See 7.a.

TSU NO: 1	SEED GRASS	04/15/2007	2 Acres
TSU NO: 2	SEED GRASS	04/15/2007	2 Acres
TSU NO: 3	SEED GRASS	04/15/2007	3 Acres

d. *Thinning:* Within all units a precommercial thinning and/or pruning may occur approximately 20 years following planting.

TSU NO: 1	PCT	10/01/2027	85 Acres
TSU NO: 2	PCT	10/01/2027	83 Acres
TSU NO: 3	PCT	10/01/2027	43 Acres

Roads: Road assessments will be conducted annually and may include ditch and culvert cleanout and road grading as necessary to minimize erosion and failures.

Rock Pits and/or Sale: None

Other: Special forest products such as white pine and cedar boughs may be available.

8. *List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.*

☐*303 (d) – listed water body in WAU:* ☐*temp* ☐*sediment* ☐*completed TMDL (total maximum daily load):*
☐*Landscape plan:*
☐*Watershed analysis:*
☐*Interdisciplinary team (ID Team) report:*
☒*Road design plan:* September 14, 2004
☐*Wildlife report:*
☐*Geotechnical report:*
☐*Other specialist report(s):*
☐*Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☐*Rock pit plan:*
☒*Other:Water type change form; GIS generated WAU maps reporting soil types, mass wasting potential, erosion potential, soil stability, and habitat typing; Department of Natural Resources (DNR) TRAX; Department of Natural Resources Forest Resource Plan; DNR Smoke Management Plan; State Soil Survey; Usk Road Maintenance and Abandonment Plan (RMAP) #R2302158.*

9. *Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.*

None are known to be pending.

10. *List any government approvals or permits that will be needed for your proposal, if known.*

☒*HPA* ☒*Burning permit* ☐*Shoreline permit* ☐*Incidental take permit* ☒*FPA #* _____ ☐*Other:*

11. *Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)*

a. *Complete proposal description:*

The entire 640 acres of Section 36, Township 32 North, Range 43 East, W.M. was considered for the Grayback Timber Sale. Riparian zones, previous harvests, rock outcrops, brush fields, unit size and forest health were considered when determining the sale units to be harvested. Gross sale acres, which include rock outcrops and road right of ways is approximately 212 acres, while the net acres are approximately 211 acres. Harvest will be deferred in the remaining timberland within this section until an undetermined future date.

Estimated volume: 2,656 Mbf

Units:	Gross acres:	Net acres:
1	85	85
2	84	83
3	43	43

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall Unit objectives.*

Pre-harvest:

The timber sale Units are comprised of a mixture of 30% western larch, 40% Douglas fir, 15% western red cedar, and 15% grand fir. Approximately, 45 acres were selectively harvested within the proposal area removing the lodgepole pine in 1988, yet the stand remains relatively overstocked. In the larger clearings and old skid trails, lodge polepine, Douglas fir, grand fir and western red cedar have naturally re-estabilished. The remaining 165 acres have not been harvested within the last 85 years and is a fairly even-aged stand.

A number of the large, older cedar have fire scars throughout the section. Pockets of root rot are present throughout the sale area and bark beetles have killed a number of the ponderosa pine. Approximately 90% of the western larch is infected with dwarf mistletoe disease.

The entire section is a primarily north aspect with slopes ranging from 0-75% slopes. Elevation ranges from 2,240 feet to 3,000 feet. Approximately 30% percent of the sale is a TSHE/CLUN habitat type, 35% is TSHE/GYDR habitat type, and the remaining drier slopes of the sale area is comprised of 10% ABGR/VAME-CLUN and 25% PSME/PHMA habitat type. In the last 20 years radial growth rates have declined as the stands have reached maturity.

Type of harvest:

Even-age managed utilizing both natural and artificial regeneration in the harvest Units while leaving 8-11 trees per acre including legacy trees. Retention trees will favor healthy, disease free, dominant and codominant western larch, western white pine, ponderosa pine and Dougals fir when appropriate. The retention trees will be randomly clumped and scattered throughout the stand depending on forest health, tree species and quality. Harvest activities will ensure that 750-1000 cubic feet of coarse woody debris per acre remain following completion. All Units will be ground based harvested. Approximately 15 acres of Unit 3 is located on 70% rocky, slopes. According to the soil survey these soils have a medium to high soil erosion potential and low to medium mass wasting potential. Skid trails will be constructed near the top of the ridge where the slopes are approximately 40% and go back trails will also be constructed. In addition, skidders with line pulling capabilities will be required to pull trees to skid trails up to 150' to minimize skid trail construction. Green recruitment trees have been clumped in areas of steep rocky ground, where ground based harvested would be unfeasible. The contract administrator, prior to construction, will approve all skid trail locations.

The entire sale will be planted at 225 trees per acre with a mix of western larch, western white pine and ponderosa pine.

Overall sale Unit objectives:

All Units will be managed to provide long-term revenue to the 03 (Common School) trust, while promoting future forest growth and health. Forest health will be restored by favoring early seral species as leave trees and by planting early seral species following harvest operations. Improved vigor and growth following completion of this project are expected to limit the adverse effects of pine beetle and root disease.

c. *Road activity summary. See also forest practice application (FPA) for maps and more details.*

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		2,810	3	
Reconstruction		2,286		
Abandonment		0	0	
Bridge Install/Replace	0			
Culvert Install/Replace (fish)	1			1
Culvert Install/Replace (no fish)	3			

In addition, 521 feet of optional temporary road construction and 15,653 feet of maintenance are included in this proposal. See Road Plan for complete details.

12. *Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")*

a. *Legal description:*

Section 36, Township 32 North, Range 43 East, W.M.

b. *Distance and direction from nearest town (include road names):*

All Units are located at the end of Yonck Road, approximately 0.6 miles south of West Calispell Road. Yonck Road is located 0.7 miles down West Calispell Road from Highway 211, behind Davis Lake approximately 6 miles south of Usk, Washington in Pend Oreille County.

c. *Identify the watershed administrative Unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under " SEPA Center.")*

WAU Name	WAU Acres	Proposal Acres
DEER VALLEY	33765	141
WINCHESTER CREEK	49076	66
TENMILE CREEK	43452	5

13. *Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)*

The Deer Valley WAU totals 33,765 acres. The WAU extends from the city of Newport to the northwest along the Pend Oreille River to Usk and Highway 211 south to approximately Deer Valley Road. The WAU encompasses the west side of the Pend Oreille River Valley and the associated rolling and mountainous terrain. State ownership comprises approximately 4% of the WAU. This proposal comprises less than 1% of the WAU and about 11% of the DNR ownership in the WAU. Within the last seven years, the state has harvested less than 1% of its ownership in this WAU. Approximately 64% of those acres harvested were even-aged harvests and approximately 36% were uneven-aged harvests. Currently, the DNR is planning to harvest approximately 2 MMbf from the McCloud Timber Sale located in Section 36, Township 32 North, Range 44 East, W.M. The state expects to have additional harvests in the WAU, but it is not known where or when at this time. Private land comprises approximately 96% of the land in the WAU. Non-industrial private landowners are scattered throughout the WAU, along with small blocks of private industrurial landowners. Tribal, federal and county government combined own approximately 1% of the WAU. Of the 32,514 acres not managed by the DNR, about 35% of this acreage has been harvested in the last seven years. Approximately 24% of these harvested acres on private lands have been

even-aged harvests and the remaining 76% have been uneven-aged harvests. It is not known how much and/or when other landowners with active Forest Practice applications will conduct harvests on their ownership within the Deer Valley WAU.

The Ten Mile WAU totals 43,452 acres. The WAU extends from Calispell Lake up the Ten Mile Creek drainage to the 49° North Ski Resort area to the north side of Boyer Mountain. State ownership comprises approximately 9% of the WAU. This proposal comprises less then 1% of the WAU and less than 1% of the DNR ownership in the WAU. Within the last seven years, the state has harvested approximately 5% of its ownership in this WAU. Approximately 42% of those harvests were even-aged harvests and approximately 58% were uneven-aged harvests. The DNR is currently planning to harvest 3.5 MMbf from the Power North Timber Sale located in Sections 4 and 5, all in Township 31 North, Range 43 East, W.M. The state expects to have additional harvests in the WAUs, but it is not known where or when at this time. Private land comprises approximately 36% of the land in the WAU. Non-industrial private landowners dominate the lower elevations, while private industrial landowners and government held lands dominate the higher elevations of the mountainous terrain. There is no tribal or county government lands within the WAU. Federal land comprises approximately 55% of the land within the WAU. Of the 39,462 acres not managed by the DNR, about 19% of these acres have been harvested in the last seven years. Approximately 31% of these harvested acres on private lands have been even-aged harvests and the remaining 69% have been uneven-aged harvests. It is not known how much and/or when other landowners with active Forest Practice applications will conduct harvests on their ownership within the Ten Mile WAU.

The Winchester WAU totals 49,076 acres and consists of the flat, field lands of the Calispell Lake area west to the head waters that feed the lake (ie. Wenchester Creek, Small Creek and East Small Creek). The WAU State ownership comprises approximately 2% of the WAU. This proposal composes less then 1% of the WAU and approximately 6% of the DNR ownership in the WAU. Within the last seven years, the state has harvested approximately one acre of its ownership in this WAU. This one acre was an uneven-aged harvest. The DNR is currently planning to harvest 3 MMbf from the Solly Timber Sale located in Section 16, Township 32 North, Range 43 East, W.M. The state expects to have additional harvests in the WAUs, but it is not known where or when at this time. Private land comprises approximately 44% of the land in the WAU. Non-industrial private landowners dominate the lower elevations, while private industrial landowners and government held lands dominate the higher elevations of the mountainous terrain. Tribal and county government combined own approximately 2% of the WAU. Federal land comprises approximately 40% of the land within the WAU and other state owned lands comprise 12% of the WAU. Of the 48,049 acres not managed by the DNR, about 21% these acres have been harvested in the last seven years. Approximately 26% of these harvested acres on private land have been even-aged harvests and the remaining 74% have been uneven-aged harvests. It is not known how much and/or when other landowners with active Forest Practice applications will conduct harvests on their ownership within the Winchester WAU.

Streams within the proposal area have an increase of flow during spring runoff, however, with proper road construction and maintenance, RMZ buffers, unit design, harvest and hauling restrictions and proper skid trail locations the potential for contributing to peak flow events are expected to be minimized. See B.1.h and B.1.d.5 for erosion and slope stability control measures.

The proposal is within a Bull Trout Evolutionary Significant Unit, although no harvest will take place within the Type 3 RMZ.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. *General description of the site (check one):*

☐*Flat,* ☐*Rolling,* ☐*Hilly,* ☐*Steep Slopes,* ☐*Mountainous,* ☒*Other:* Half of the sale is located on rolling ground, while the other half is located on a steep slope.

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Deer Valley WAU consists of the Pend Oreille River Valley lands, foothills and mountainous terrain with elevations ranging from approximately 2100’ to 3500’. The WAU extends from the city of Newport to the northwest along the Pend Oreille River to Usk and Highway 211 south to approximately Deer Valley Road.

The Winchester Creek WAU consists of the flat, field lands of the Calispell Lake area west to the head waters that feed the lake (ie. Winchester Creek, Small Creek and East Small Creek). The terrain ranges from flat, fields around Calispell Lake to mountainous areas to the west with elevations ranging from 2200’ to 5000’.

The Ten Mile Creek WAU consists of primarily mountainous terrain with elevations ranging from approximately 2500’ to 5000’. The WAU boundary stretches from Calispell Lake up the Ten Mile Creek drainage to the 49° North Ski Resort area to the north side of Boyer Mountain.

Within all the WAUs average precipitation ranges from 18” to 30”, with the majority of this in the form of snow. Vegetation within the WAUs varies with elevation and aspect. The lower elevations and south aspects are dominated with Douglas fir and ponderosa pine on the drier sites. Higher elevations and northern aspects are dominated with a mix of Douglas fir, western larch, western red cedar, western white pine, western hemlock, grand fir and lodgepole pine. Vegetation zones within the WAUs are the interior Douglas fir, grand fir and interior cedar/hemlock.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

The elevation of the timber sale proposal ranges between 2240’ to 3000’ and is a north aspect. Half of the sale area occupies the flat and rolling terrain to the south of Calispell Lake. The other half of the sale area occupies the steep slopes on the edge of the more mountainous terrain. All species listed above can be found within the sale area. This proposal is in the interior cedar/hemlock vegetation zone.

b. *What is the steepest slope on the site (approximate percent slope)?*

Less than 10% of the sale area has 70% slopes. These slopes can be found in Unit 3.

c. *What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.*

Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent

deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
5391	STONY SILT LOAM	0-40	54	Low	Medium
5394	NEWBELL-ROCK OUTCROP-COMPLEX	40-65	40	No Data	No Data
6796	ROCK OUTCROP-NEWBELL-COMPLEX	30-65	38	No Data	No Data
5389	SILT LOAM	25-40	24	Low	Medium
0249	LOAM	0-15	21	Insignificant	Medium
5393	NEWBELL-ROCK OUTCROP-COMPLEX	15-40	19	No Data	No Data
4661	SILT LOAM	0-5	14	Insignificant	Medium
3864	LOAM	0-3	1	No Data	Low
6791	ROCK OUTCROP-ORTHENTS-COMPLEX	50-90	1	No Data	No Data

d. *Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.*

None known.

1) Surface indications:

2) Is there evidence of natural slope failures in the sub-basin(s)?
☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

Associated management activity: Within the Ten Mile WAU along new road construction on Flowery Trail Road. The cut and fill slopes show shallow slope failures.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

Approximately 15 acres of Unit 3 is located on 70% rocky, slopes. According to the soil survey these soils have a medium to high soil erosion potential and low to medium mass wasting potential. Skid trails will be constructed near the top of the ridge where the slopes are approximately 40% and go back trails will be constructed. In addition, skidders with line pulling capabilities will be required to pull trees to skid trails up to 150' to minimize trail construction. Green recruitment trees have been clumped in areas of steep rocky ground, where ground based harvested would be unfeasible. The contract administrator, prior to construction, will approve all skid trail locations. No typed stream lies within Unit 3. No roads will be constructed on this steep slope and any roads constructed on ground greater than 50% will be full bench construction. See B.1.h for additional protection measures.

e. *Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.*

Approx. acreage new roads: 3 *Approx. acreage new landings:* 3 *Fill source:*

f. *Could erosion occur as a result of clearing, construction, or use? If so, generally describe.*

Surface erosion may occur on road cut and fill slopes, especially during storms and spring runoff, although none is foreseen to discharge into typed waters due to minimal stream crossings, proper road design, and effective water control structures. Hauling will be restricted during wet conditions and spring breakup. Non-erodible surface material will be placed where necessary to maintain stability. In addition, grass seeding will take place where necessary to control erosion.

g. *About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):*

Approximately 1% of the site will be in native material surface roads. No permanent impervious surfaces will be used in this proposal.

h. *Propose measures to reduce or control erosion, or other impacts to the earth, if any:*
(Include protection measures for minimizing compaction or rutting.)

No felling, skidding and hauling activities will occur during spring breakup, from February 1 to May 15, unless otherwise approved by the contract administrator. Harvest and haul activites will be monitored and activities will be restricted where needed to prevent sediment delivery to streams. Roads have been designed with drivable dips, in/outslopes, crowned, ditched, and cross-drains to minimize erosion potentials and conduct water onto naturally vegetated forest floors. Energy dissipating structures will be placed at the outfall of cross-drains where necessary to prevent erosion. Culvert head walls will be armored when necessary. Skid trails will be grass seeded, water barred and have a debris-scattered where necessary. Grass seeding will also occur on cut and fill slopes where necessary. All roads constructed on a 50% or greater slope will be constructed to full bench specifications.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

This proposal will involve vehicle emissions, and dust from logging, skidding and hauling. If pile or broadcast burns occur, it will adhere to the State's Smoke Management Program.

b. *Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.*

None foreseen

c. *Proposed measures to reduce or control emissions or other impacts to air, if any:*

None foreseen to be necessary

3. Water

a. *Surface:*

1) *Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)*

a) Downstream water bodies:

Two Type 5 streams are located within the timber sale boundaries. An additional two Type 5 streams, listed on the Forest Practices Activity Maps located within Units 2 and 3 have no overland connection with any higher order streams. The other two Type 5 streams have seasonal runoff that flow into two different Type 4 streams that are bounded outside of the timber sale with at least a 50 foot buffer. One of these Type 4 streams flows into Marsh Creek which is a Type 3 stream within the bull trout overlay. This stream and its RMZ is bounded out of the timber sale area although the haul route crosses this stream. Both the Type 4 and Marsh Creek flow into Law Lake located in the adjacent section.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
Stream; unnamed	5	2	30 ft. equipment limitation
Stream; unnamed	4	2	50 ft.
Stream; Marsh Creek	3	1	110 ft.

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

The two Type 5 streams within the harvest units will have a 30' equipment limitation zone. The Type 4 streams are either outside of the timber sale or have at least a 50' no harvest zone. The Type 3 stream (Marsh Creek) is located outside of the timber sale, however, an existing stream adjacent road that will be part of the haul route is located within the RMZ and will also cross this stream. The Usk RMAP lists this road as requiring routine maintenance and replacement of a fish barrier. Currently, the road is not delivering sediment to Marsh Creek and will be monitored during use with this proposal for delivery issues. Corrective measures will be taken before sediment delivery issues arise. The fish barrier on this stream will be replaced in conjunction with this proposal.

2) *Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.*
☐*No* ☒*Yes (See RMZ/WMZ table above and timber sale map.)*

Description (include culverts): Road construction culvert installation, skidding and hauling will occur within 200' of the described waters. See B.3.a.1.c and the Forest Practice Application for further information.

3) *Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.*

Fill and dredge material will be the absoulute minimum needed for the installation and removal of culverts. Clean adjacent fill material will be used.

4) *Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)*
☐*No* ☒*Yes, description:*

Diversion may take place during the installation of the replacement culvert to correct the fish passage barrier on Marsh Creek.

5) *Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.*
☒*No* ☐*Yes, describe location:*

6) *Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.*
☒*No* ☐*Yes, type and volume:*

7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*

Yes, within the sub-basin naturally occurring surface erosion is an on going process with or without management activities. Approximately 32% of the Winchester Creek WAU has high soil erosion potential and 16% has very unstable slope stability if disturbed. Approximately 15% of the Deer Valley Creek WAU has high soil erosion potential and 2% has very unstable slope stability if disturbed. Approximately 64% of the Ten Mile Creek WAU has high soil erosion potential and 26% has very unstable slope stability if disturbed. Techniques mentioned in B.1.h. are anticipated to minimize the potential for surface erosion and/or mass wasting to enter surface water.

8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?* ☐*No* ☒*Yes, describe changes and possible causes:*

Within the Winchester WAU there is evidence of changes to channels associated with both erosion caused by peak flows and natural aggradation in the Calispell Lake area and the flat lands surrounding the lake. When comparing the aerial photos from 1967 to 2000 a number of stream locations on this flat land and the Lake itself have changed both shape and size. Farming and irrigation of the flat lands surrounding the lake may be a major cause for the changes in the aerial photos. Within the Ten Mile WAU known surface erosion and mass wasting is associated with the new construction of Flowery Trail Road which runs parallel to Ten Mile Creek. It is unknown if this has contributed to channel changes, but has the potential to deliver sediment. This is due to the steep cut banks and fill slopes. Within the Deer Valley WAU, no known channel pattern, width, or location has changed significantly due to erosion or mass wasting.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
☒*No* ☐*Yes, explain:*

There is little or no anticipated adverse impact to stream flow or water quality as a result of activities associated with this proposal. Sale unit design, coordinated skidding patterns, operational restrictions, road design and prescriptions are expected to minimize any potential for adverse impacts. On areas of steep slopes in Unit 3 where surface erosion is more likely, there are no typed streams with overland connectivity to a higher order stream.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

Winchester: DNR owned land two miles/section, Non-DNR three miles/section; Deer Valley: DNR owned five miles/section, Non-DNR three miles/section; Ten Mile: DNR owned three miles/section, Non-DNR four miles/section.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐*No* ☒*Yes, describe:*

In the privately owned section to the south of the state land there is a road that is delivering sediment during spring runoff to a stream due to improper road maintenance and design.

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU <u>or</u> sub-basin(s) for the ROS percentage questions below.*
☐*No* ☒*Yes, approximate percent of WAU in significant ROS zone.*

Approximate percent of sub-basin(s): Winchester 34%, Deer Valley 79%, Ten Mile 29%

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU <u>or</u> sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

Each WAU was evaluated for hydrological maturity from arial photos and field observations. The WAUs were determined to be approximately 57% mature for the Winchester WAU, 60% mature for the Deer Valley WAU, and 55% mature for the Ten Mile WAU. When calculated for significant increase to peak flows, these WAUs were determined to be below the threshold for this potential.

13) Is there evidence of changes to channels associated with peak flows in the WAU <u>or</u> sub-basin(s)?
☐*No* ☒*Yes, describe observations:*

Within the Winchester WAU there is evidence of changes to channels associated with both peak flows and natural aggradation in the Calispell Lake area and the flat lands surrounding the lake. When comparing the aerial photos from 1967 to 2000 a number of stream locations on this flat land and the Lake itself have changed both shape, location and size. Within the Ten Mile WAU and Deer Valley WAU there is no known significant channel changes associated with peak flows.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

The entire sale is within the rain-on-snow dominated zone in each of the above WAUs. Protective measures have been designed within this proposal to minimize the effects of peak flow events.

Implementation of protection measures, such as proper road construction and maintenance, RMZ buffers, unit design, and proper skid trail location are expected to minimize the chance of contributing to peak flow events. No skid trails will be located in draws. Skid trails will be maintained and water barred to prevent excessive runoff. Approximately 15 acres of Unit 3 is located on 70% rocky, slopes. According to the soil survey these soils have a medium to high soil erosion potential and low to medium mass wasting potential. Skid trails will be constructed near the top of the ridge where the slopes are approximately 40% and go back trails will be constructed. In addition, skidder line will be required to pull trees to skid trails up to 150’ to minimize trail construction. Green recruitment trees have been clumped in areas of steep rocky ground, where ground based harvested would be unfeasible. The contract administrator, prior to construction, will approve all skid trail locations.

To assure this proposal will not contribute to an increased chance of environment impact, several protection measures have been included in the proposal. Coordinated skidding patterns and landing locations, effective contract administration and normal road maintenance is expected to minimize erosion potential within and adjacent to the proposal area. Water bars and/or drivable dips, ditching and cross drains, out sloping, monitoring, and revegetation of cut slopes and skid trails will be used as needed to minimize the potential for soil erosion, mass wasting events, and contributing to peak flows within each of the WAUs. The contract administrator will monitor activities to determine if and when hauling, yarding, and or felling may be suspended if wet weather conditions threaten public resources within the sale area or along the haul routes. Hauling on all roads will be suspended during spring breakup or during wet conditions that would cause significant rutting of

road surfaces. Drainage structures have been identified where appropriate to minimize or eliminate the risk of erosion. Additional measures will be incorporated when necessary as determined by the contract administrator. Proper road maintenance and cross drainage on the haul route will ensure that water accumulating on the running surfaces will be dispersed onto the undisturbed forest floor. Ground based harvested in Unit 3 on steep slopes will be monitored and the contractor will be required to pull up to 150' of line. All skid trails and go-back trails will be preapproved by the contract administrator. Harvested areas will be planted to ensure reestablishment of forest cover back on the landscape. The actual change to the amount of forest vegetative cover is expected to be minimal considering the overall size and ownership of the WAUs.

In addition, see B.h.1 for protection measures regarding roads and harvest activities. See A.13 for ownership and harvest type and frequency within the WAUs.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☐*No* ☒*Yes, possible impacts:*

Surface runoff may increase with timber removal. An under-sized culvert on private land down steam from state land on Marsh Creek may not support an increase of surface runoff.

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

It is not anticipated that any special protection measures will be needed. See B.h.1 and B.3.a.14 for additional protection measures.

b. *Ground Water:*

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No ground water will be withdrawn. Ground water recharge directly below culvert outlets may increase slightly. Reduction in water quality is not expected to occur as a result of activities from this proposal.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste materials will be discharged into the ground. No lubricants will be disposed of on site.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?
☐*No* ☒*Yes, describe:*

Marsh Creek feeds into Law Lake and is used to water cattle. During spring runoff there may be a slight increase of surface runoff for a couple of seasons following the timber sale due to the reduction of vegetation. Once the proposal area revegetates after completing this project, surface runoff is expected to decrease.

a) Note protection measures, if any.

No special protection measures are foreseen other than those listed in B.h.1 and B.3.a.14.

c. *Water Runoff (including storm water):*

1) *Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.*

Snowmelt and rain will be the main sources of water runoff. Runoff will be collected by road ditches and diverted through cross drain structures onto the forest floor. Drainage structures will be located to prevent runoff from directly entering stream channels. No ditched water will directly flow into typed waters. In addition, roads will be outsloped, crowned and drivable dips will be utilized where appropriate.

2) *Could waste materials enter ground or surface waters? If so, generally describe.*

None are anticipated with the protective measures proposed.

a) Note protection measures, if any.

See B.3.b.3.

d. *Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:*
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

See B.1.h for protection measures in addition to those listed in the above sections.

4. Plants

a. *Check or circle types of vegetation found on the site:*

☒*deciduous tree:* ☒*alder,* ☒*maple,* ☐*aspen,* ☐*cottonwood,* ☒*western larch,* ☒*birch,* ☐*other:*
☒*evergreen tree:* ☒*Douglas fir,* ☒*grand fir,* ☐*Pacific silver fir,* ☒*ponderosa pine,* ☒*lodgepole pine,* ☒*western hemlock,* ☐*mountain hemlock,* ☒*Englemann spruce,* ☐*Sitka spruce,* ☒*red cedar,* ☐*yellow cedar,* ☐*other:*
☒*shrubs:* ☒*huckleberry,* ☐*salmonberry,* ☐*salal,* ☒*other:snowberry, ninebark, oceanspray, willow*
☒*grass*
☐*pasture*
☐*crop or grain*
☒*wet soil plants:* ☐*cattail,* ☐*buttercup,* ☐*bullrush,* ☐*skunk cabbage,* ☐*devil's club,* ☒*other:* sarsaparilla, bunchberry
☐*water plants:* ☐*water lily,* ☐*eelgrass,* ☐*milfoil,* ☐*other:*
☐*other types of vegetation:*
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

This proposal will remove approximately 2.6 MMbf of conifer species. Reforestation will consist of planting western larch, western white pine and ponderosa pine in addition to natural reforestation. Ground vegetation will be disturbed during harvest operations. Grass seeding will occur on skid trails and road rights of ways to minimize the soil erosion potential.

1) *Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")*

The major timber species immediately adjacent to the removal area is lodgepole pine, western red cedar, Douglas fir, western larch and grand fir. Unit 1 is bordered to the north by an even-aged harvest that was harvested in the spring of 2004. To the west of Unit 1 is a 100+ acre even-aged harvest that looks to have taken place in 2000. To the south of Unit 1 there is an approximately 85 year old stand managed by the DNR and to the east is a portion of state land where a lodgepole removal (uneven-aged) cut took place in 1988. Unit 2 to the east is half bordered by a field and half by an even-aged cut that took place in 2003. To the south is an even-age harvest that took place in approximately 1995. The remainder of the stand is bordered by the lodgepole removal that took place in 1988. To the south of Unit 3 is an even-aged harvest that took place approximately 1995 and to the west is a 25 year old lodgepole pine stand. The majority of the remaining land that surrounds Unit 3 is a brush hill slope with scattered timber.

2) *Retention tree plan:*

Leave tree preferences were based upon species, size, value to wildlife, health, location and dominance. All retention trees are marked in blue paint. Retention trees will be randomly clumped and scattered throughout the stand. All snags will remain on site unless they need to be felled for safety or operational reasons. Harvest activities will ensure 350-700 cubic feet of course woody debris (CWD) is left on site. See 11. b for details of prescription.

c. *List threatened or endangered plant species known to be on or near the site.*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

d. *Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:*

Following the harvest, western larch, western white pine and ponderosa pine will be planted in all units.

5. Animal

a. *Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:*

birds: ☒*hawk,* ☐*heron,* ☐*eagle,* ☒*songbirds,* ☐*pigeon,* ☒*other:* pileated woodpecker
mammals: ☒*deer,* ☒*bear,* ☒*elk,* ☐*beaver,* ☒*other: moose*
fish: ☐*bass,* ☐*salmon,* ☒*trout,* ☐*herring,* ☐*shellfish,* ☐*other:*
unique habitats: ☐*talus slopes,* ☐*caves,* ☐*cliffs,* ☐*oak woodlands,* ☐*balds,* ☐*mineral springs*

b. List any threatened or endangered species known to be on or near the site *(include federal- and state-listed species).*

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	44869	Gray Wolf	Threatened	Endangered
2	44870	Gray Wolf	Threatened	Endangered
3	44871	Gray Wolf	Threatened	Endangered

c. *Is the site part of a migration route? If so, explain.*
☒*Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

All of Washington State is considered part of the Pacific Flyway. No impacts are anticipated as a result of this proposal.

d. *Proposed measures to preserve or enhance wildlife, if any:*

1) *Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.*

Species /Habitat: Bull trout — *Protection Measures:* No harvest within RMZ and replacing fish A fish passage barrier.

Species /Habitat: Pileated woodpecker — *Protection Measures:* Trees with cavity nesting sites when identified will be left.

6. Energy and Natural Resources

a. *What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.*

No energy source will be needed for this proposal.

b. *Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.*

Removal of trees will not adversely affect any potential use of solar energy.

c. *What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:*

None will be included as part of this proposal.

7. Environmental Health

a. *Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.*

1) *Describe special emergency services that might be required.*

Washington State Deparment of Ecology will be notified if any significant spills occur and appropriate action will be taken. The Department of Natural Resources is on hand for fire suppression. Emergency medical or air ambulance for personal injuries.

2) *Proposed measures to reduce or control environmental health hazards, if any:*

Compliance with existing state laws regarding environmental health hazards. Fire equipment will be required on site during fire season.

b. *Noise*

1) *What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?*

No noises will affect this proposal.

2) *What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.*

During road construction, maintenance and harvest activities there will be some noise associated with heavy equipment, chain saws and log truck operations.

3) *Proposed measures to reduce or control noise impacts, if any:*

None are expected to be necessary.

8. Land and Shoreline Use

a. *What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)*

The state land is currently used for timber production and dispersed recreational activities such as hunting and hiking. Along the northern half of the east line there is a home site and the land is used for crop and cattle. Along the east half of the north line the land is used for a home site as well. The rest of the surrounding land is used for timber production.

b. *Has the site been used for agriculture? If so, describe.*

The state section of land is leased for grazing.

c. *Describe any structures on the site.*

No structures on site

d. *Will any structures be demolished? If so, what?*

None to demolish

e. *What is the current zoning classification of the site?*

No zoning in rural Pend Oreille County

f. *What is the current comprehensive plan designation of the site?*

Rural

g. *If applicable, what is the current shoreline master program designation of the site?*

Not applicable to this proposal

h. *Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.*

No

i. *Approximately how many people would reside or work in the completed project?*

No people will work or reside on site after the completed project.

j. *Approximately how many people would the completed project displace?*

No one will be displaced.

k. *Proposed measures to avoid or reduce displacement impacts, if any:*

No measures are proposed.

l. *Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:*

This project shall maintain and/or enhance compatibility with existing and projected land uses such as timber production, dispersed recreation, and use by wildlife for forage, travel and cover.

9. Housing

a. *Approximately how many Units would be provided, if any? Indicate whether high, middle, or low-income housing.*

Not applicable to this proposal.

b. *Approximately how many Units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.*

Not applicable to this proposal.

c. *Proposed measures to reduce or control housing impacts, if any:*

Not applicable to this proposal.

10. Aesthetics

a. *What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?*

Not applicable to this proposal.

b. *What views in the immediate vicinity would be altered or obstructed?*

1) Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?
☒*No* ☐*Yes, viewing location:*

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?
☐*No* ☒*Yes, scenic corridor name:*

All of Unit 3 and portions of Units 1 and 2 are visible while traveling south on Highway 211.

3) How will this proposal affect any views described in 1) or 2) above?

From Highway 211 the hillside will be harvested leaving 8-11 trees per acre and some skid trails may be visible.

c. *Proposed measures to reduce or control aesthetic impacts, if any:*

None are foreseen to be necessary.

11. Light and Glare

a. *What type of light or glare will the proposal produce? What time of day would it mainly occur?*

Possible glare from logging equipment during daylight.

b. *Could light or glare from the finished project be a safety hazard or interfere with views?*

Finished project should not produce glare.

c. *What existing off-site sources of light or glare may affect your proposal?*

None should affect this proposal.

d. *Proposed measures to reduce or control light and glare impacts, if any:*

None are foreseen to be necessary.

12. Recreation

a. *What designated and informal recreational opportunities are in the immediate vicinity?*

Davis Lake is located approximately one-half mile to the east of the site which provides fishing, swimming, water sports and a church camp. Within the state section only informal activities such as hunting and hiking occur.

b. *Would the proposed project displace any existing recreational uses? If so, describe:*

During harvest some of the occasional users of state land could be displaced. However, it would not exceed the length of the sale.

c. *Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:*

No measures are proposed.

13. Historic and Cultural Preservation

a. *Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.*

None known, none were found within the DNR TRAX system.

b. *Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.*

None known, none were found within the DNR TRAX system.

c. *Proposed measures to reduce or control impacts, if any:*
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

If an unknown historic or cultural resource is discovered during the operation, the following process will occur:

1) Cease operations affecting the discovered site.
2) Physically identify the site on the ground so it can be located and impacts mitigated (a buffer if necessary).
3) Contact region state lands assistant and district manager, and work in collaboration on timing, confidentiality, and notification of tribes and other affected parties.

14. Transportation

a. *Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.*

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?

There is currently no transportation problem to which this proposal would contribute. It is possible that this proposal could add noise, dust, maintenance or safety problems on the haul route. Warning signs will be posted informing the public of timber harvesting and hauling activities on Yonck Road and West Calispell Road. In addition, if dust and the loss of road surface becomes a problem, the contractor will be required to abate dust from June 15 to October 15.

b. *Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?*

No public transit system in area.

c. *How many parking spaces would the completed project have? How many would the project eliminate?*

No parking spaces will be completed or eliminated with this proposal.

d. *Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).*

See A.11.c. These roads are public roads, yet their accessed is controlled by a locked gate.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

This proposal should have no significant impact on the current transportation system. Any impact all will be temporary, and limited to the period of time during which operations are being conducted. Access to existing roads in the sale area may be restricted to the general public during operations for safety reasons.

e. *Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.*

No

f. *How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.*

This proposal should result in no increase in vehicle trips per day upon completion of the timber sale. However, log hauling may involve approximately five to ten loads per day during the course of operations.

g. *Proposed measures to reduce or control transportation impacts, if any:*

Warning signs will be posted informing the public of timber harvesting and hauling activities on Yonck Road and West Calispell Road.

15. Public Services

a. *Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.*

None are anticipated.

b. *Proposed measures to reduce or control direct impacts on public services, if any.*

Warning signs will be posted informing the public of timber harvesting and hauling activities on Yonck Road and West Calispell Road.

16. Utilities

a. *Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.*

None are currently available or needed for this project.

b. *Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.*

No utilities will be required for this proposal.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: _____ Date: _____
Jaime Rohrbach Arcadia District Forester I

Completed by: _____ Date: _____
Andrew Stenbeck Arcadia District Manager

Completed by: _____ Date: _____
Bob McKellar Management Forester